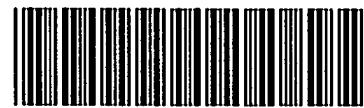# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _09/889,330_

Source: _1Fw/6_

Date Processed by STIC: _1/14/05_

ENTERED

RAW SEQUENCE LISTING   DATE: 01/14/2005
PATENT APPLICATION: US/09/889,330   TIME: 13:00:17

Input Set : A:\249146us.app
Output Set: N:\CRF4\01142005\I889330.raw

```
 3 <110> APPLICANT: KOLTERMAN, ORVILLE G.
 4         YOUNG, ANDREW A.
 6 <120> TITLE OF INVENTION: NOVEL EXENDIN AGONIST FORMULATIONS AND METHODS OF
ADMINISTRATION
 7         THEREOF
 9 <130> FILE REFERENCE: 249/146US
11 <140> CURRENT APPLICATION NUMBER: 09/889,330
12 <141> CURRENT FILING DATE: 2001-12-27
14 <150> PRIOR APPLICATION NUMBER: PCT/US00/00902
15 <151> PRIOR FILING DATE: 2000-01-14
17 <150> PRIOR APPLICATION NUMBER: US 60/116,380
18 <151> PRIOR FILING DATE: 1999-01-14
20 <150> PRIOR APPLICATION NUMBER: US 60/175,365
21 <151> PRIOR FILING DATE: 2000-01-10
23 <160> NUMBER OF SEQ ID NOS: 189
25 <170> SOFTWARE: PatentIn Ver. 3.2
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 39
29 <212> TYPE: PRT
30 <213> ORGANISM: Heloderma horridum
32 <220> FEATURE:
33 <221> NAME/KEY: MOD_RES
34 <222> LOCATION: (39)
35 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2
37 <400> SEQUENCE: 1
38 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
39   1               5                  10                  15
41 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
42               20                  25                  30
44 Ser Gly Ala Pro Pro Pro Ser
45           35
48 <210> SEQ ID NO: 2
49 <211> LENGTH: 39
50 <212> TYPE: PRT
51 <213> ORGANISM: Heloderma suspectum
53 <220> FEATURE:
54 <221> NAME/KEY: MOD_RES
55 <222> LOCATION: (39)
56 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2
58 <400> SEQUENCE: 2
59 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
60   1               5                  10                  15
62 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
63               20                  25                  30
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RAW SEQUENCE LISTING   DATE: 01/14/2005
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        Input Set : A:\249146us.app
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 66           35
 69 <210> SEQ ID NO: 3
 70 <211> LENGTH: 39
 71 <212> TYPE: PRT
 72 <213> ORGANISM: Artificial Sequence
 74 <220> FEATURE:
 75 <223> OTHER INFORMATION: synthetic construct
 77 <220> FEATURE:
 78 <221> NAME/KEY: VARIANT
 79 <222> LOCATION: (1)
 80 <223> OTHER INFORMATION: His, Arg or Thr
 82 <220> FEATURE:
 83 <221> NAME/KEY: VARIANT
 84 <222> LOCATION: (2)
 85 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
 87 <220> FEATURE:
 88 <221> NAME/KEY: VARIANT
 89 <222> LOCATION: (3)
 90 <223> OTHER INFORMATION: Asp or Glu
 92 <220> FEATURE:
 93 <221> NAME/KEY: VARIANT
 94 <222> LOCATION: (6)
 95 <223> OTHER INFORMATION: Phe, Tyr or naphthalanine
 97 <220> FEATURE:
 98 <221> NAME/KEY: VARIANT
 99 <222> LOCATION: (7)
100 <223> OTHER INFORMATION: Thr or Ser
102 <220> FEATURE:
103 <221> NAME/KEY: VARIANT
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105 <223> OTHER INFORMATION: Ser or Thr
107 <220> FEATURE:
108 <221> NAME/KEY: VARIANT
109 <222> LOCATION: (9)
110 <223> OTHER INFORMATION: Asp or Glu
112 <220> FEATURE:
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114 <222> LOCATION: (10)
115 <223> OTHER INFORMATION: Leu, Ile, Val, pentylglycine or Met
117 <220> FEATURE:
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119 <222> LOCATION: (14)
120 <223> OTHER INFORMATION: Leu, Ile, pentylglycine, Val or Met
122 <220> FEATURE:
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124 <222> LOCATION: (22)
125 <223> OTHER INFORMATION: Phe, Tyr or naphthalanine
127 <220> FEATURE:
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128 <221> NAME/KEY: VARIANT
129 <222> LOCATION: (23)
130 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met
132 <220> FEATURE:
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134 <222> LOCATION: (24)
135 <223> OTHER INFORMATION: Glu or Asp
137 <220> FEATURE:
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139 <222> LOCATION: (25)
140 <223> OTHER INFORMATION: Trp, Phe, Tyr or naphthylalanine
142 <220> FEATURE:
143 <221> NAME/KEY: VARIANT
144 <222> LOCATION: (31)
145 <223> OTHER INFORMATION: independently Pro, homoproline, 3-hydroxyproline,
146        4-hydroxyproline, thioproline, N-alkylglycine,
147        N-alkylpentylglycine or N-alkylalanine
149 <220> FEATURE:
150 <221> NAME/KEY: VARIANT
151 <222> LOCATION: (36)..(38)
152 <223> OTHER INFORMATION: independently Pro, homoproline, 3-hydroxyproline,
153        4-hydroxyproline, thioproline, N-alkylglycine,
154        N-alkylpentylglycine or N-alkylalanine
156 <220> FEATURE:
157 <221> NAME/KEY: VARIANT
158 <222> LOCATION: (39)
159 <223> OTHER INFORMATION: Ser, Thr or Tyr
161 <220> FEATURE:
162 <223> OTHER INFORMATION: c-term is -OH or NH2, with the proviso that the compound
163        does not have the formula of either SEQ ID NOS 1 or 2
165 <400> SEQUENCE: 3
W--> 166 Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
167   1               5                   10                  15
169 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
170               20                  25                  30
172 Ser Gly Ala Xaa Xaa Xaa Xaa
173           35
175 <210> SEQ ID NO: 4
176 <211> LENGTH: 38
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: synthetic construct
183 <220> FEATURE:
184 <221> NAME/KEY: VARIANT
185 <222> LOCATION: (1)
186 <223> OTHER INFORMATION: His, Arg, or Tyr
188 <220> FEATURE:
189 <221> NAME/KEY: VARIANT
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190 <222> LOCATION: (2)
191 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
193 <220> FEATURE:
194 <221> NAME/KEY: VARIANT
195 <222> LOCATION: (3)
196 <223> OTHER INFORMATION: Asp or Glu
198 <220> FEATURE:
199 <221> NAME/KEY: VARIANT
200 <222> LOCATION: (5)
201 <223> OTHER INFORMATION: Ala or Thr
203 <220> FEATURE:
204 <221> NAME/KEY: VARIANT
205 <222> LOCATION: (6)
206 <223> OTHER INFORMATION: Ala, Phe, Tyr or napthylalanine
208 <220> FEATURE:
209 <221> NAME/KEY: VARIANT
210 <222> LOCATION: (7)
211 <223> OTHER INFORMATION: Thr or Ser
213 <220> FEATURE:
214 <221> NAME/KEY: VARIANT
215 <222> LOCATION: (8)
216 <223> OTHER INFORMATION: Ala, Ser or Thr
218 <220> FEATURE:
219 <221> NAME/KEY: VARIANT
220 <222> LOCATION: (9)
221 <223> OTHER INFORMATION: Asp or Glu
223 <220> FEATURE:
224 <221> NAME/KEY: VARIANT
225 <222> LOCATION: (10)
226 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met
228 <220> FEATURE:
229 <221> NAME/KEY: VARIANT
230 <222> LOCATION: (11)
231 <223> OTHER INFORMATION: Ala or Ser
233 <220> FEATURE:
234 <221> NAME/KEY: VARIANT
235 <222> LOCATION: (12)
236 <223> OTHER INFORMATION: Ala or Lys
238 <220> FEATURE:
239 <221> NAME/KEY: VARIANT
240 <222> LOCATION: (13)
241 <223> OTHER INFORMATION: Ala or Gln
243 <220> FEATURE:
244 <221> NAME/KEY: VARIANT
245 <222> LOCATION: (14)
246 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met
248 <220> FEATURE:
249 <221> NAME/KEY: VARIANT
250 <222> LOCATION: (15)..(17)
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251 <223> OTHER INFORMATION: Ala or Glu
253 <220> FEATURE:
254 <221> NAME/KEY: VARIANT
255 <222> LOCATION: (19)
256 <223> OTHER INFORMATION: Ala or Val
258 <220> FEATURE:
259 <221> NAME/KEY: VARIANT
260 <222> LOCATION: (20)
261 <223> OTHER INFORMATION: Ala or Arg
263 <220> FEATURE:
264 <221> NAME/KEY: VARIANT
265 <222> LOCATION: (21)
266 <223> OTHER INFORMATION: Ala or Leu
268 <220> FEATURE:
269 <221> NAME/KEY: VARIANT
270 <222> LOCATION: (22)
271 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine
273 <220> FEATURE:
274 <221> NAME/KEY: VARIANT
275 <222> LOCATION: (23)
276 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met
278 <220> FEATURE:
279 <221> NAME/KEY: VARIANT
280 <222> LOCATION: (24)
281 <223> OTHER INFORMATION: Ala, Glu or Asp
283 <220> FEATURE:
284 <221> NAME/KEY: VARIANT
285 <222> LOCATION: (25)
286 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine
288 <220> FEATURE:
289 <221> NAME/KEY: VARIANT
290 <222> LOCATION: (26)
291 <223> OTHER INFORMATION: Ala or Leu
293 <220> FEATURE:
294 <221> NAME/KEY: VARIANT
295 <222> LOCATION: (27)
296 <223> OTHER INFORMATION: Ala or Lys
298 <220> FEATURE:
299 <221> NAME/KEY: VARIANT
300 <222> LOCATION: (28)
301 <223> OTHER INFORMATION: Ala or Asn
303 <220> FEATURE:
304 <221> NAME/KEY: MOD_RES
305 <222> LOCATION: (31)
306 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
307       N-alkylpentylglycine or N-alkylalanine
309 <220> FEATURE:
310 <221> NAME/KEY: MOD_RES
311 <222> LOCATION: (36)..(38)
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/14/2005
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Input Set : A:\249146us.app
Output Set: N:\CRF4\01142005\I889330.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:3;  Xaa Pos. 1,2,3,6,7,8,9,10,14,22,23,24,25,31,36,37,38,39
Seq#:4;  Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23,24
Seq#:4;  Xaa Pos. 25,26,27,28,31,36,37,38
Seq#:5;  Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:5;  Xaa Pos. 24,25,26,27,28,31,36,37,38,39
Seq#:15; Xaa Pos. 6
Seq#:20; Xaa Pos. 10
Seq#:21; Xaa Pos. 10
Seq#:22; Xaa Pos. 14
Seq#:23; Xaa Pos. 14
Seq#:24; Xaa Pos. 22
Seq#:27; Xaa Pos. 23
Seq#:28; Xaa Pos. 23
Seq#:31; Xaa Pos. 31,36,37,38
Seq#:32; Xaa Pos. 36,37,38
Seq#:33; Xaa Pos. 31,36,37,38
Seq#:34; Xaa Pos. 36,37,38
Seq#:35; Xaa Pos. 31,36,37,38
Seq#:36; Xaa Pos. 31,36,37,38
Seq#:37; Xaa Pos. 31,36,37,38
Seq#:38; Xaa Pos. 36,37,38
Seq#:39; Xaa Pos. 31,36,37,38
Seq#:81; Xaa Pos. 31,36,37,38
Seq#:82; Xaa Pos. 36,37,38
Seq#:83; Xaa Pos. 31
Seq#:84; Xaa Pos. 31,36,37
Seq#:85; Xaa Pos. 31,36,37
Seq#:86; Xaa Pos. 31,36
Seq#:89; Xaa Pos. 6
Seq#:93; Xaa Pos. 10
Seq#:94; Xaa Pos. 22
Seq#:95; Xaa Pos. 23
Seq#:99; Xaa Pos. 31,36,37
Seq#:115; Xaa Pos. 6
Seq#:116; Xaa Pos. 6
Seq#:127; Xaa Pos. 10
Seq#:128; Xaa Pos. 10
Seq#:137; Xaa Pos. 14
Seq#:138; Xaa Pos. 14
Seq#:151; Xaa Pos. 22
Seq#:152; Xaa Pos. 22
Seq#:155; Xaa Pos. 23
Seq#:156; Xaa Pos. 23
Seq#:181; Xaa Pos. 31,36,37,38
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/14/2005
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Input Set : A:\249146us.app
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Seq#:182; Xaa Pos. 36,37,38
Seq#:183; Xaa Pos. 31,36,37
Seq#:184; Xaa Pos. 31,36

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:5; Line(s) 484

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Input Set : **A:\249146us.app**
Output Set: **N:\CRF4\01142005\I889330.raw**

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L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
M:341 Repeated in SeqNo=3
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:16
L:1032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:16
L:1061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16
L:1143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16
M:341 Repeated in SeqNo=31
L:1175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:32
L:1206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:16
M:341 Repeated in SeqNo=33
L:1238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:32
L:1269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16
M:341 Repeated in SeqNo=35
L:1303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16
M:341 Repeated in SeqNo=36
L:1337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16
M:341 Repeated in SeqNo=37
L:1369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:32
L:1400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:16
M:341 Repeated in SeqNo=39
L:2331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:16
M:341 Repeated in SeqNo=81
L:2363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:32
L:2389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:16
L:2423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:16
M:341 Repeated in SeqNo=84
L:2457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:16
M:341 Repeated in SeqNo=85
L:2491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:16
M:341 Repeated in SeqNo=86
L:2562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0
L:2651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0
L:2680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:16
L:2706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:16
L:2803 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:16
M:341 Repeated in SeqNo=99
L:3144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115 after pos.:0
L:3170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116 after pos.:0
L:3406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:0
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Input Set : **A:\249146us.app**
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L:3432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128 after pos.:0
L:3626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:0